From: Brent Weber
To: dwhite@responsegroupinc.com; spill12; Adams, Adam
Subject: Try Again - Tank Deconstruction Objective
Date: Tuesday, May 7, 2019 5:11:15 PM
Attachments: Tank Deconstruction Objective - Revised 5-7-19.docx

---

Here is another corrected version. I missed another reference to PFAS on page 3.

Brent J. Weber
Intercontinental Terminals Company LLC
Senior Vice President, Sales and Marketing
Office: 281-884-0277
Cell: 225-806-5136
Bweber@iterm.com

Tank Deconstruction Objective

All of the tanks have been cleaned as well as possible. However, most of the tanks have been damaged severely which has made it very difficult to clean and remove the remaining materials from the tanks. Until all of the material is removed, the potential of air emissions exist, especially from the benzene containing tanks: 80-15, 80-14, 80-10, and 80-7.

This plan is meant to outline the demolition plan for those tanks so the remaining benzene containing material can be removed. Due to the layout of the tank farm, 80-13 will also be demolished in order to access tanks 80-10 and 80-7.

Start Date:

Tank deconstruction is scheduled to begin on Thursday May 9, 2019.

Preparation:

ITC to identify point of contact:

Project oversite:	Rick Tillery
Safety lead:	Chris Meeks
Contractor:	Billy Flagel
Contractor Safety:	Brian Smith
IH Lead:	CTEH

All SDS' will be reviewed with all contractors and ITC employees prior to beginning of deconstruction activities. Hard copies of SDS for Pygas and Toluene will be provided.

All permitting procedures and contractor procedures will be reviewed prior to beginning work.

All ITC Entry Requirements (DP-09-S-a1) will be followed with the exception of:

- 19ITCBD
- 19VPP
- 19CS

TWIC escort ratio (5:1) will be followed at all times.

ITC to finalize tank disposal (scrap metal) contractor plan with supplied transportation.

Prior to beginning deconstruction:

- H2 and N2 lines running along the wall will be decommissioned.
- The east wall will be modified near tank 80-14 and 80-15 to allow proper access into the tank farm and the north wall. A small berm will be installed at any point the wall is

modified. Ramp will be installed over the berm to allow access and egress of equipment to and from the tank farm.

- The fire water line along the north wall will be removed.
- The CIWA (Channel Industrial Water Administration) line will be removed from the top of the wall.
- Several sections of the north wall will be removed due to damage and to limit potential impact to the H2 and N2 piping.
- The H2 and N2 lines will be cribbed and secured to prevent potential movement.
- Temporary berms will be constructed at any point the wall is removed. These berms are being installed to ensure containment of any liquid in the tank farm.

Sequence:

The sequence of deconstruction will be: 80-15, 80-14, 80-13, 80-10, and finally 80-7.

Protection of Tank 80-8:

Tank 80-8 is in the middle of the tank farm so it will be protected from this work by distance. In addition, there are protective barricades and fencing around the pump and manifold area of tank 80-8 to ensure the area is protected.

Schedule:

Tank deconstruction will occur on days only.

It is expected to take 1 day to deconstruct the tank plus 3 days to clean and decontaminate the metal per approved procedures. A total of 4 days per tank is the approximate schedule.

Metal removal will be done on days only, but all cleaning will be on a 24-hour basis. Two 12-hour shifts will be utilized.

Notifications:

Prior to beginning the deconstruction process, ITC will send out an E-Notify, CAER Message, and a notification to the Industrial stakeholders.

All agencies will be notified by Incident Command at least 24 hours before each tank is deconstructed.

Safety and Air Emissions:

Radio Communication to be provided to the contractor and utilize the safety channel.

No Foam will contain PFAS.

Permit will define the level of PPE and work/rest ratio (based on Heat Index). PPE will be determined on air monitoring equipment and any hazards that exist in the tank farm.

All workers will be in Bunker Gear and Fresh Air while tank deconstruction occurs.

Safety will be a major focus during this operation. Prior to the deconstruction of each tank, fire-fighting equipment will be staged on the 4 quadrants of each tank.

All current fire suppression equipment will remain in place which consist of a foam cannons on the south and north side of the tank farm.

During the cutting process, a low pressure water spray will be applied to minimize the risk of flash fires. In addition, foam will be applied as needed to address flash fires and minimize air emissions.

Foam will only be applied if needed.

No foam will contain PFAS.

All water and foam used will be contained in the tank farm, then will be pumped or transferred to one of the tanks designated from response material (80-33, 100-28, or 100-15 are the preferred tanks).

Air Monitoring personnel and equipment will be used on each quadrant of the tank farm and in close proximity to each tank being deconstructed the entire time tank deconstruction occurs. Additional air monitoring resources will be used both in the Industrial area and the Community especially along Tidal Road, Independence Parkway, and near our Industrial Neighbors.

The action level for benzene is 0.5 ppm outside of the impacted tank farm. E-notify will be used to communicate action levels to industrial neighbors and municipalities as required.

Deconstruction Process:

The actual deconstruction process will vary from tank to tank depending on the accessibility and extent each tank is damaged. The primary method will be the use of hydraulic shears; however, water cutting may also be used.

Establish of collapse zones with consideration of pipelines, especially the nitrogen and hydrogen lines on the north containment berm.

Floors to be address by internal process (drill and evaluate soil for LEL, emission, liquid)

As the tanks are deconstructed, the metal will be removed from the tank area and determination whether or not the metal must be placed into decontamination area for

cleaning, then to a waste storage device. An open temporary tank will be used. The cut pieces will be dipped into the cleaning solution, and then placed on the scrap truck.

The metal will be disposed by approved methods but most likely will be sent to a recycle yard.

No need to sample or test for NORM.

This plan does not exempt the regulated entity from complying with all state and federal regulation.

Once the metal material is removed sufficiently, cleaning crews will remove remaining material from the tank including any liquids or solids. This material will be removed using vacuum trucks, vacuum boxes, water spray, etc. The material will be either stored in the same tanks being used to collect material from the tank farm or stored in the appropriate containers prior to disposal per approved methods.

This part of the operation will be worked 24/7 until completion.

Once the remaining material has been removed, all of the metal and remaining tank will be removed down to the base.

This process will be repeated for each tank until tanks 80-15, 80-14, 80-13, 80-10, and 80-7 are deconstructed and cleaned.

No procedural change will occur from tank to tank. The procedure will be the same for each of these five tanks.

It is expected to take 1 day to deconstruct the tank plus 3 days to clean and decontaminate the metal per approved procedures. A total of 4 days per tank is the approximate schedule.

Basic Steps for Deconstruction:

- Begin removing metal from the top with hydraulic sheers
- Work down the tank to remove the IFR
- Once tank is down to the last ring of metal and the IFR is removed, stop
- Enter the tank and clean the remaining material (sludge, liquid, etc.)
- Once material is removed, complete metal removal of walls and floors
- All metal will be removed from the tank then to decontamination process

Equipment Staging:

Need equipment certification and operator qualification and certs.

Three excavators with hydraulic sheers will be used for this process. Two will be used for primary cutting and the last is a smaller, more precise sheer to cut smaller pieces. Two

excavators will be used outside of the tank farm to handle the metal to the trucks or storage bins.

Diagram of the Tank Deconstruction Objective:

See attached document.

Note:

Tank 80-7	Aluminum IFR	IFR collapse/shredded	Tank collapsed
Tank 80-10	Aluminum IFR	IFR intact	Tank erect
Tank 80-13	Steel	IFR intact	Tank erect
Tank 80-14	Steel IFR	IFR intact	Tank partial collapsed
Tank 80-15	Aluminum	IFR collapse/shredded	Tank collapsed